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10/518,507	12/20/2004	Steven John Hard	66307-330-7	8386

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EXAMINER

CORDRAY, DENNIS R

ART UNIT PAPER NUMBER

1731

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/518,507

Applicant(s)

HARD, STEVEN JOHN

Examiner

Dennis Cordray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6/22/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "said fibrous substrate including an elongate element partially embedded therein and a discrete aperture extending therethrough and exposing at least a part of the elongate element." It is not clear whether the discrete aperture extends through the substrate, the elongate element, or both. In all cases, an edge of the elongate element can be exposed, even if only the edge of an aperture through the element is exposed.

Claims 2-18 depend from Claim 1 and inherit the indefiniteness thereof.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9-12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al (EP 1114893 A1) in view of Tooth et al (4462866).

Murakami et al teaches that a windowed anti-falsification paper having an elongate element (thread) embedded within the paper and visible through the windows is known in prior art for use in bank notes. Figure 7 represents such a paper and the thread is clearly visible through the windows and the windows clearly extend beyond the edges of the thread, thus exposing the edges of the thread and forming a gap between the edges and the perimeters of the windows (Fig. 7; col 1, lines 15-23). Murakami et al also teaches that several methods are known for manufacturing the paper, including the method described in U.S. Patent No. 4462866 (Tooth et al) (col 1, lines 24-45).

Murakami et al does not specifically disclose that the windows extend completely through the paper.

Tooth et al discloses windowed security paper having an elongate element embedded within the paper and visible through the windows on at least one side of the paper. Tooth et al discloses a method of forming the paper by depositing fibers on a porous support surface having impervious portions (drainage restrictions) and providing the elongate element extending over the impervious portions so that fibers are not deposited between the impervious portions and the elongate element, thus providing the windows. The elongate element is embedded within the paper between the windows (Abstract; col 2, lines 35-68; col 3, lines 4-6; col 5, lines 10-14). In one embodiment, the impervious portions are large enough in area so that fibers are not deposited either below or above the thread and an aperture is formed completely through the paper with the elongate element exposed within (Fig. 6b; col 6, lines 44-57).

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Tooth et al also discloses windows formed that expose only a portion of the elongate element on one side of the paper (col 4, lines 11-18).

The art of Murakami et al, Tooth et al and the instant invention are analogous as pertaining to security paper having an embedded elongate element that is exposed at windows in the paper. It would have been obvious to one of ordinary skill in the art to provide an embedded elongate element and windows (apertures) extending through the paper that are larger than the width of the element to expose the element and the edges thereof in the prior art security paper taught by Murakami et al in view of Tooth et al as a functionally equivalent and well known type of security paper. It would also have been obvious to use either one or a plurality of windows in the paper as functionally equivalent options. It would have been obvious to make the paper using the method of Tooth et al as a well known method for producing such papers.

Claims 2-8, 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al in view of Tooth et al as applied to claims 1, 9-12 and 17 above, and further in view of Isherwood et al (WO 00/39391) and Crane (5486022).

Murakami et al discloses a security paper having an embedded thread that is partially exposed at windowed portions of the paper (Abstract). The thread can be any kind of thread known for anti-falsification paper, such as metal, metallized, or hologram thread (col 6, lines 18-26).

Tooth et al discloses that the security papers produced with windows and embedded threads are used as banknotes, cheques, identity cards and others. The

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papers can also serve as general sheet materials for non-security or decorative uses (col 3, lines 62-68).

Murakami et al does not disclose the multiple security uses for the paper or non-security uses. Murakami et al and Tooth et al do not disclose a thread containing indicia, color shift areas, security embossing, printing or a liquid crystal material.

Isherwood et al disclose a paper comprising an elongate element partially disposed within the thickness of the paper sheet but exposed at one or more spaced locations on one or both sides of the sheet (Abs). The elongate element can partially or wholly metallized and can contain indicia, images or information, holographic images, colorshift areas, security embossings, a liquid crystal material and/or be printed on one or both sides (p 6, lines 22-29). The paper can be a non-security paper or a security paper, such as a banknote, cheque, travelers cheque, identity card, passport or bond (p 4, lines 14-18; p 17, lines 3-7).

Crane discloses security threads that are embedded in security documents for use as banknotes, labels and other documents or means of identification (Abstract; col 1, lines 8-20).

The art of Murakami et al, Tooth et al, Isherwood et al, Crane and the instant invention are analogous as pertaining to security paper having an embedded elongate element. It would have been obvious to one of ordinary skill in the art to provide an embedded elongate element partially or wholly metallized or containing indicia, images, information, holographic images, colorshift areas, security embossings, a liquid crystal material or printed on one or both sides in the prior art security paper taught by

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Murakami et al in view of Tooth et al as functionally equivalent and well known options in the art. It would also have been obvious to use the paper for non-security paper or a security paper, such as a banknote, cheque, travelers cheque, identity card, passport, bond or label as well known uses for such paper. It would have been obvious to make stationery or labels as non-security applications. It would also have been obvious to include the windows at the same location on each sheet of multiple sheet documents such as ticketbooks or checkbooks to simplify their manufacture.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al in view of Tooth et al as applied to claims 1, 9-12 and 17 above, and further in view of Merry (5127677).

Murakami et al in view of Tooth et al do not disclose a multiple sheet document having apertures in each sheet offset from the apertures in adjacent sheets.

Merry discloses a means for securing sequential pages in a book, such as a passport, comprising marking the pages at the edges opposite the bound edge with a marking pattern that forms a visual image that is different for each page and that would be distorted if any pages of the book were missing (Abstract; col 1, lines 6-15). Merry discloses that visual inspection of the marked unbound edges of the pages would easily reveal if any pages had been removed.

The art of Murakami et al, Tooth et al and Merry are analogous as pertaining to documents having security markings. It would have been obvious to a person skilled in the art at the time if the invention to create a multiple sheet security document with

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apertures in locations offset from one another in adjacent sheets with the prior art paper of Isherwood et al in view of Murakami et al and further in view of Merry in order to detect removal of pages from the book by visual inspection. It would have also been obvious to create the apertures on the edge of each sheet to provide instant detection of missing pages.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al in view of Tooth et al as applied to claims 1, 9-12 and 17 above, and further in view of Isherwood et al.

Murakami et al does not disclose multiple kinds of windows in the paper, some of which do not expose the edges of the embedded element.

Tooth et al discloses some windows that do not wholly expose the embedded element (col 4, lines 11-18), depending on the size of the blinded areas.

Isherwood et al discloses that multiple features can be combined in a single security paper (Figs 12-16; p 7, lines 36-37; p 16, lines 34-35).

It would have been obvious to provide some windows that expose only part of the elongate element in the prior art paper of Murakami et al in view of Tooth et al and further in view of Isherwood et al to make the paper more difficult to duplicate.

### ***Response to Arguments***

Applicant's amendments, filed 6/15/2006, have overcome the rejections of claims 1, 3 and 9 under 35 U.S.C. 102(b) and claims 1-18 under 35 U.S.C. 112. Applicant's



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arguments with respect to the rejections of claims 1-18 under 35 U.S.C. 103(a) have been fully considered and are persuasive. As applicant points out, the apertures of Murakami do not extend through the paper, but only extend through the top layer to expose the thread below and there is no disclosure of a hole completely through the paper. Therefore, the rejections have been withdrawn. However, upon further consideration, new ground(s) of rejection are made as detailed above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*ORL*

DRC

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